

## AMENDMENTS TO THE CLAIMS

The following is a listing of claims that replaces all prior versions, and listings, of claims in the application.

1. (Original) A method for purifying a carboxylated glycan, said method comprising:
  - a) providing:
    - i) a molecule comprising a carboxylated glycan;
    - ii) biotinylated diamino pyridine (BAP); and
    - iii) an exoglycosidase;
  - b) conjugating said molecule to said BAP to produce a BAP-glycan conjugate;
  - c) treating said BAP-glycan conjugate with said exoglycosidase to produce a first treated BAP-glycan conjugate comprising a first anionic BAP-glycan conjugate having from 1 to 2 negative charges per molecule; and
  - d) isolating said first anionic BAP-glycan conjugate, thereby purifying a carboxylated glycan.

### Claims 2-5 (Currently cancelled).

6. (Original) A method for purifying a carboxylated glycan, said method comprising:
  - a) providing a molecule comprising a carboxylated glycan;
  - b) isolating from said molecule a first anionic glycan containing from 1 to 4 negative charges; and
  - c) desialylating said isolated first anionic glycan to produce a desialylated anionic glycan containing from 1 to 4 negative charges, thereby purifying a carboxylated glycan.

**Claims 7-8 (Currently cancelled).**

9. (Original) A method for identifying a test agent as reducing specific binding of a polypeptide to a carboxylated glycan, comprising:

- a) providing:
  - i) a carboxylated glycan purified by the method of Claim 1;
  - ii) an antibody that specifically binds to said carboxylated glycan;  
and
  - iii) a test agent;
- b) contacting said purified carboxylated glycan, said antibody, and said test agent; and
- c) detecting a reduction in the level of binding of said antibody to said carboxylated glycan in the presence of said test agent compared to in the absence of said test agent, thereby identifying said test agent as reducing specific binding of a polypeptide to a carboxylated glycan.

**Claims 10-22 (Currently cancelled).**

23. (Original) A method for identifying a test agent as reducing specific binding of a polypeptide to a carboxylated glycan, comprising:

- a) providing:
  - i) a carboxylated glycan purified by the method of Claim 6;
  - ii) leukocyte cells; and
  - iii) a test agent;
- b) contacting said purified carboxylated glycan, said leukocyte cells, and said test agent; and
- c) detecting a reduction in the level of adhesion of said leukocytes to said purified carboxylated glycan in the presence of said test agent compared to in the absence of said test agent, thereby identifying said test agent as reducing specific binding of a polypeptide to a carboxylated glycan.

**Claims 24-28 (Currently cancelled).**

29. (Original) A carboxylated glycan purified by the method of Claim 1.

**Claims 30-31 (Currently cancelled).**

32. (Original) A carboxylated glycan purified by the method of Claim 6.

33. (Original) An antibody produced by EE4.1 cells, GB3.1 cells, B2.6 cells, or EH2.7 cells.

34. (Original) An antibody produced by GB3.1 cells.

35. (Original) An antibody specific for a carboxylated glycan purified by the method of Claim 1.

**Claims 36-52 (Currently cancelled).**

53. (Original) A hybridoma cell line that produces a monoclonal antibody selected from the group consisting of mAbEE4.1, mAbGB3.1, mAbB2.6, and mAbEH2.7.

54. (Original) A hybridoma cell line that produces monoclonal antibody mAbGB3.1.

55. (Original) A method for reducing extravasation of leukocyte cells in endothelial tissue, comprising:

- a) providing:
  - i) endothelial tissue comprising leukocyte cells; and
  - ii) an agent that reduces specific binding of a polypeptide to a carboxylated glycan purified by the method of Claim 1; and

- b) administering said agent to said endothelial tissue such that specific binding of said polypeptide to said carboxylated glycan is reduced, thereby reducing extravasation of said leukocyte cells in said endothelial tissue.

**Claims 56-78 (Currently cancelled).**

79. (Original) A method for reducing adherence of leukocyte cells to endothelial cells, comprising:

- a) providing:
  - i) leukocyte cells;
  - ii) endothelial cells; and
  - iii) an agent that reduces specific binding of a polypeptide to a carboxylated glycan purified by the method of Claim 1; and
- b) contacting said leukocyte cells, said endothelial cells, and said agent such that adherence of said leukocyte cells to said endothelial cells is reduced in the presence of said agent compared to in the absence of said agent.

**Claims 80-87 (Currently cancelled).**

88. (Original) A method for reducing inflammation in a tissue in a mammalian subject, comprising:

- a) providing:
  - i) a tissue; and
  - ii) an agent that reduces specific binding of a polypeptide to a carboxylated glycan purified by the method of Claim 1; and
- b) administering said agent to said tissue such that inflammation in said tissue is reduced in the presence of said agent compared to in the absence of said agent.

**Claims 89-106 (Currently cancelled).**

107. (Original) A method for reducing cancer in a mammalian subject, comprising:
- a) providing:
    - i) a mammalian subject; and
    - ii) an agent that reduces specific binding of a polypeptide to a carboxylated glycan purified by the method of Claim 1; and
  - b) administering said agent to said subject such that cancer in said subject is reduced in the presence of said agent compared to in the absence of said agent.

**Claims 108-122 (Currently cancelled).**